

Attorney's Docket No.:07977/270001

REMARKS

Claims 1-4 and 6-13 stand rejected under 35 USC 103(a) as allegedly being unpatentable over the admitted prior art in view of Williams. This contention, however, is respectfully traversed.

The admitted prior art shows the incoming gas passing through the electrode 204 as it passes towards the substrate 201. The rejection admits that the admitted prior art does not disclose the feature of the openings in the electrodes through which the gas is exhausted, however. Specifically, claim 1 recites that "a surface of the electrode opposing the substrate is provided with a plurality of openings... the gas is exhausted from the plurality of openings".

The rejection states that Williams shows gas exhausted from a plurality of circular openings. While admittedly Williams has circular concentric openings which both supply and exhaust the gas, these concentric openings do not provide incentive to modify the admitted prior art in the way suggested by the rejection.

First of all, Williams teaches a gas is both supplied and exhausted from the same showerhead. This is the whole purpose of his concentric gas supply/exhaust elements. Therefore, presumably if Williams were used to modify the admitted prior

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art, it would do so by placing these concentric gas supplying elements in the locations where the gas is currently brought through the electrodes in the Admitted Prior Art system. This would not meet the claim language. Moreover, even this hypothetical modification would be based on hindsight, and would be contrary to Williams' teaching.

Note that the admitted prior art includes the electrode 204 which passes the gas prior to reaching the substrate. The gas is never exhausted through the electrodes at all: but rather the gas is supplied to the substrate through the electrodes. Williams admittedly teaches circular exhaust elements for the gas. However, there is no showing that Williams has these circular openings "in a surface of the electrode opposing the substrate's and that the openings are in a location to exhaust the gas. Williams' gas supplying elements are not formed in a surface of an electrode that opposes the substrate and through which the gas is exhausted.

Williams in combination with the admitted prior art, therefore, might teach a system which adds the openings of figures 3D and 3E to the admitted prior art. However, those openings would presumably be added in a non electrode system. In fact, note that Williams teaches his showerhead being formed of electrically nonconductive material see generally col. 6. While Williams teaches that other materials could include

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aluminum, see col. 6 line 44, it is respectfully suggested that there is nothing teaching that his showerhead being usable as part of an electrode. In fact Williams teaches away from using the showerhead as an electrode by stating that the showerhead should be preferably electrically nonconductive. Since the showerhead should be nonconductive, it is apparent that any attempt to combine Williams with an electrode would require going against the express teaching of Williams.

Therefore, it is respectfully suggested that this hypothetical combination is based on hindsight. Note also that a reason for the present system is to prevent the particles 417 and 418 from adhering to the surface. There is no teaching in Williams of doing this, and therefore any attempt to use Williams to modify the admitted prior art is done only based on hindsight and based on the teachings of the present specification. There is no teaching or suggestion of exhausting the gas through the plurality of openings in the surface of the electrode, as claimed. Therefore, it is respectfully suggested that claim 1 should be allowable along with the claims which depend therefrom.

Claim 10 defines a plurality of gas exhaust ports provided in the second electrode. As described above, the hypothetical combination of Williams and the prior art does not teach exhaust ports in the electrode. Therefore, it is respectfully suggested

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that all one would obtain from the admitted prior art in view of Williams is a system like the admitted prior art along with exhaust distribution of the type disclosed by Williams. Claim 15 should be allowable for similar reasons, as nothing in the hypothetical combination of the admitted prior art in view of Williams teaches or suggests exhausting gas through a plurality of openings in the second electrode. Therefore, claim 15 should be allowable along with the claims which depend therefrom.

The dependent claims 14 and 18 should be allowable for an additional reason. Each of these require that the gas inlet port is located in a position "between" the substrate and the second electrode (emphasis added). Since the gas inlet port and outlet port are provided in the same showerhead within Williams, Williams could not meet this limitation even if combined with the admitted prior art. Therefore, claims 14 and 18 should be additionally allowable on their own merits.

In view of the above amendments and remarks, therefore, all of the claims should be in condition for allowance. A formal notice to that effect is respectfully solicited.


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Respectfully submitted,

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